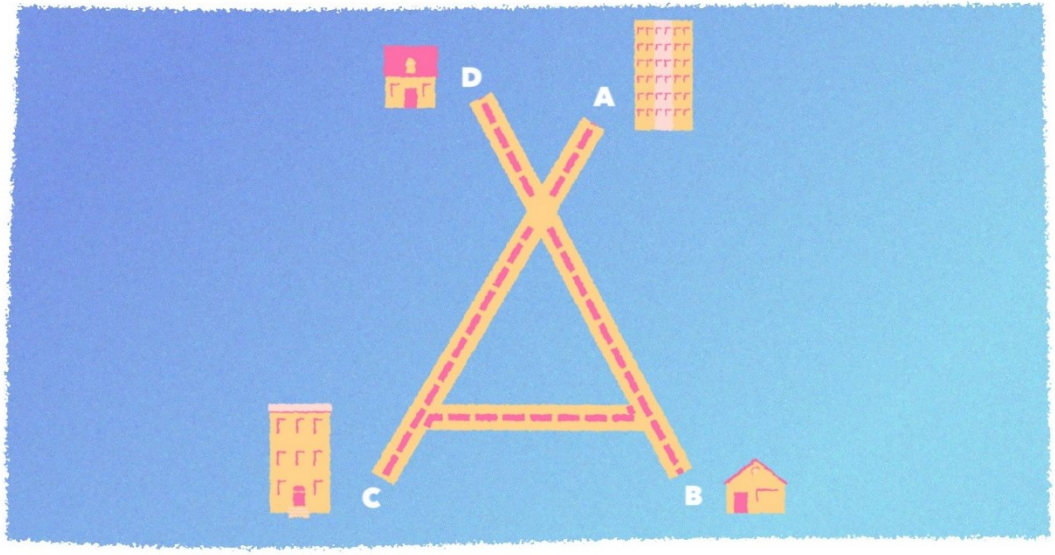
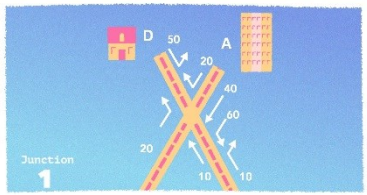
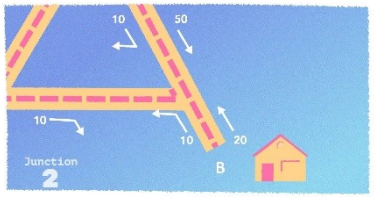
Maths Week at Work: day 4

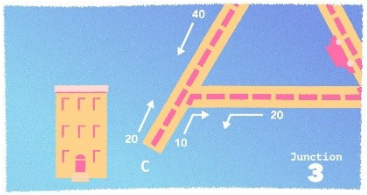
We have a road network with four exits: A, B, C, D.



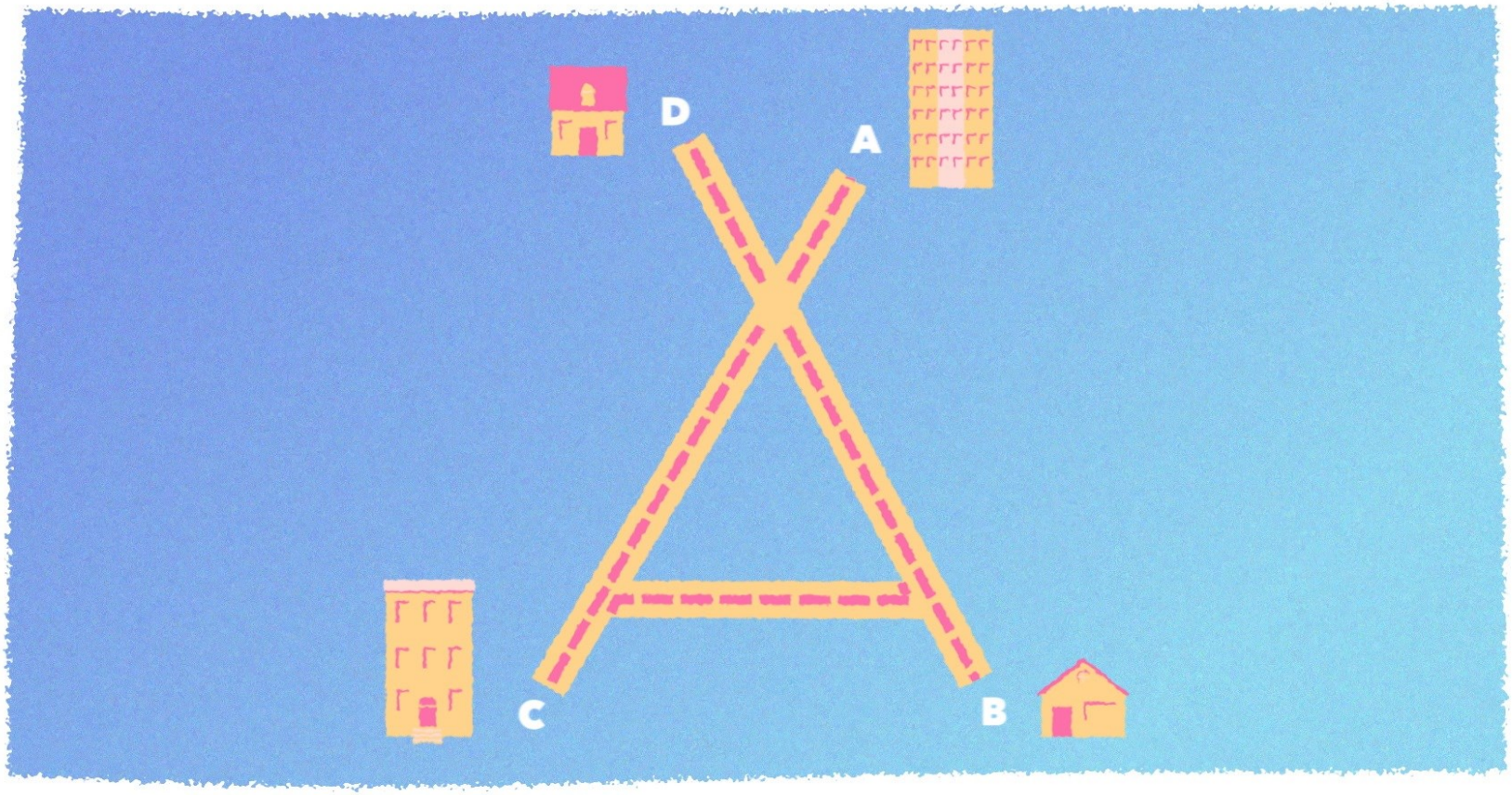
A survey company has provided junction counts for each of the three junctions. The junction counts tell us how many cars make each turn in one hour (see pictures below).

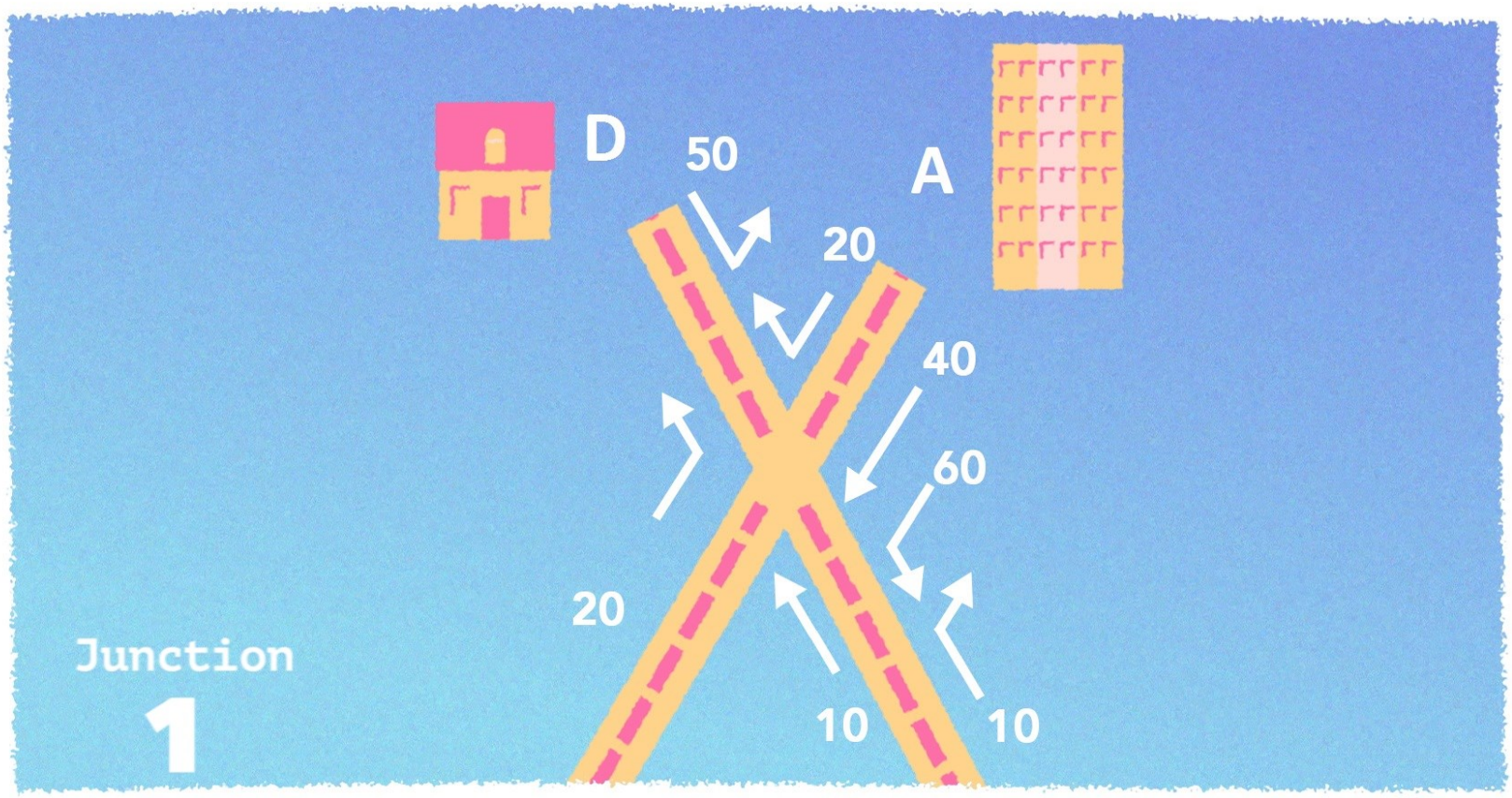


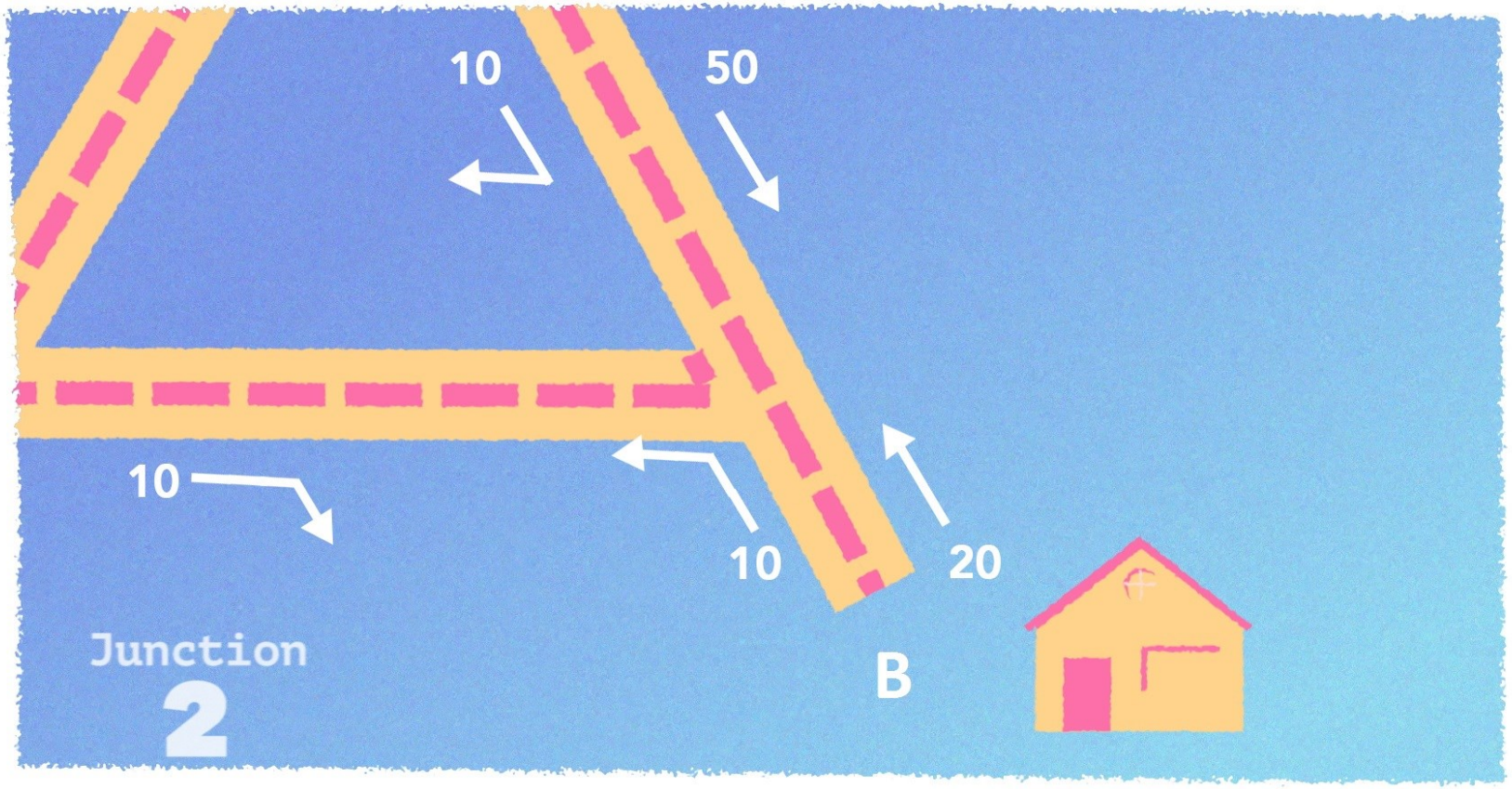


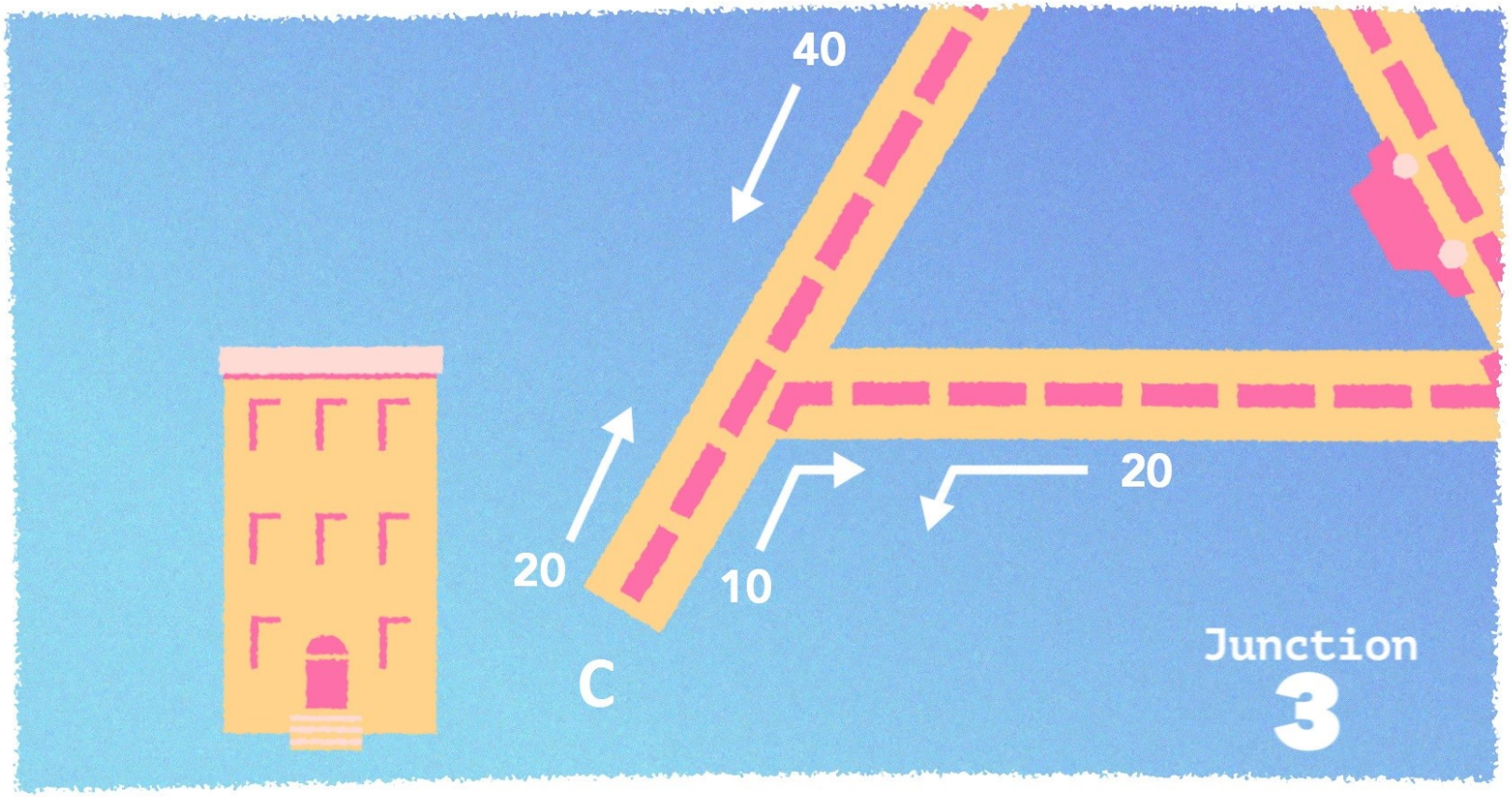


However, we do not know how many cars go from exit A to exit B, since this would be very expensive to survey. Can you work out, from the junction counts, how many cars go (in one hour) from exit A to exit B?


D
A
C
B

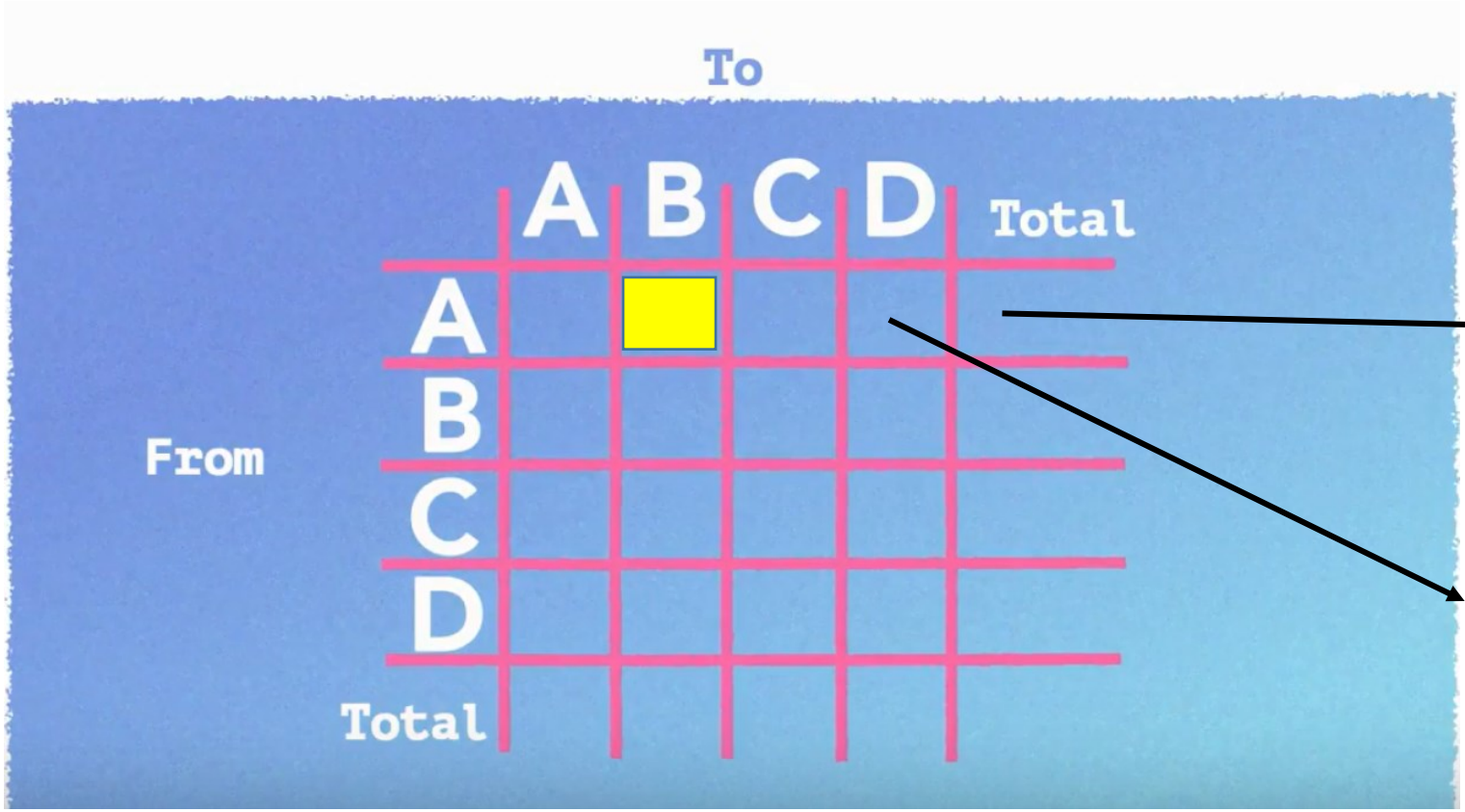

D
50
A
20
40
60
20
10
10
Junction
1


10
50
10
10
20
Junction
2
B


40
20
20
10
C
Junction
3

The Grid

To solve the puzzle, fill in the following grid. Each cell indicates the number of cars travelling between two exits. You will find a solution when you have filled in the cell highlighted in yellow.



e.g. this cell indicates the total number of cars from exit A

e. g. this cell indicates the number of cars travelling from A to D

The pictures were produced by Robert Duncan, Aaro films, and Francesca Iezzi